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| APPLICATION NO.             | FILING DATE     | FIRST NAMED INVENTOR    | ATTORNEY DOCKET NO. | CONFIRMATION NO. |
|-----------------------------|-----------------|-------------------------|---------------------|------------------|
| 09/713,041                  | 11/16/2000      | Shinya Yajima           | 0879-0292P          | 3122             |
| 2292                        | 7590 07/26/2006 |                         | EXAMINER            |                  |
| BIRCH STI<br>PO BOX 747     | EWART KOLASCH & | YODER III, CHRISS S     |                     |                  |
| FALLS CHURCH, VA 22040-0747 |                 |                         | ART UNIT            | PAPER NUMBER     |
|                             | •               |                         | 2622                |                  |
|                             |                 | DATE MAILED: 07/26/2006 |                     |                  |

Please find below and/or attached an Office communication concerning this application or proceeding.

|  | Application No.  | Applicant(s)  |  |  |  |  |
|--|--|---|--|--|--|--|
| Office Action Commons  | 09/713,041   | YAJIMA, SHINYA  |  |  |  |  |
| Office Action Summary  | Examiner   | Art Unit  |  |  |  |  |
|  | Chriss S. Yoder, III   | 2622  |  |  |  |  |
| The MAILING DATE of this communication app<br>Period for Reply   | ears on the cover sheet with the c   | orrespondence address   |  |  |  |  |
| A SHORTENED STATUTORY PERIOD FOR REPLY WHICHEVER IS LONGER, FROM THE MAILING DA  - Extensions of time may be available under the provisions of 37 CFR 1.13 after SIX (6) MONTHS from the mailing date of this communication.  - If NO period for reply is specified above, the maximum statutory period w  - Failure to reply within the set or extended period for reply will, by statute, Any reply received by the Office later than three months after the mailing earned patent term adjustment. See 37 CFR 1.704(b). | TE OF THIS COMMUNICATION 6(a). In no event, however, may a reply be timil apply and will expire SIX (6) MONTHS from cause the application to become ABANDONE | N.<br>nely filed<br>the mailing date of this communication.<br>D (35 U.S.C. § 133). |  |  |  |  |
| Status   |  |   |  |  |  |  |
| 1) Responsive to communication(s) filed on 08 Ma   | ay 2006.   |   |  |  |  |  |
|  |  |   |  |  |  |  |
| <i>'</i>   | Since this application is in condition for allowance except for formal matters, prosecution as to the merits is  |   |  |  |  |  |
| closed in accordance with the practice under <i>Ex parte Quayle</i> , 1935 C.D. 11, 453 O.G. 213.  |  |   |  |  |  |  |
| Disposition of Claims  |  |   |  |  |  |  |
| 4)⊠ Claim(s) <u>1-13 and 17-20</u> is/are pending in the application.  |  |   |  |  |  |  |
| 4a) Of the above claim(s) <u>14-16</u> is/are withdrawn from consideration.  |  |   |  |  |  |  |
| 5) Claim(s) is/are allowed.  |  |   |  |  |  |  |
| 6)⊠ Claim(s) <u>1-13, 17-18, and 20</u> is/are rejected.   |  |   |  |  |  |  |
| 7)⊠ Claim(s) <u>19</u> is/are objected to.   |  |   |  |  |  |  |
| 8) Claim(s) are subject to restriction and/or  | election requirement.  |   |  |  |  |  |
| Application Papers   |  |   |  |  |  |  |
| 9)☐ The specification is objected to by the Examiner.  |  |   |  |  |  |  |
| 10)⊠ The drawing(s) filed on <u>17 September 2004</u> is/are: a)⊠ accepted or b)□ objected to by the Examiner.   |  |   |  |  |  |  |
| Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  |  |   |  |  |  |  |
| Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).   |  |   |  |  |  |  |
| 11) The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.   |  |   |  |  |  |  |
| Priority under 35 U.S.C. § 119   |  |   |  |  |  |  |
| <ul> <li>12)  Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).</li> <li>a)  All b)  Some * c) None of:</li> <li>1.  Certified copies of the priority documents have been received.</li> </ul>   |  |   |  |  |  |  |
| 2. Certified copies of the priority documents have been received in Application No   |  |   |  |  |  |  |
| 3. Copies of the certified copies of the priority documents have been received in this National Stage  |  |   |  |  |  |  |
| application from the International Bureau (PCT Rule 17.2(a)).  |  |   |  |  |  |  |
| * See the attached detailed Office action for a list of the certified copies not received.   |  |   |  |  |  |  |
|  |  |   |  |  |  |  |
| Attachment(s)  |  |   |  |  |  |  |
| ) X Notice of References Cited (PTO-892)   | 4) Interview Summary   |   |  |  |  |  |
| 2) Notice of Draftsperson's Patent Drawing Review (PTO-948) B) Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)   | Paper No(s)/Mail Da 5) Notice of Informal P  | ate<br>atent Application (PTO-152)  |  |  |  |  |
| Paper No(s)/Mail Date  | 6) Other:  | · Tr ( · · · · · · · · · · · · · · · · ·  |  |  |  |  |
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#### **DETAILED ACTION**

### Response to Arguments

Applicant's arguments filed May 8, 2006 have been fully considered but they are not persuasive.

Applicant argues, with respect to claim 1, that the recited portion of Ohkawara indicates that the outputs of the angular velocity sensors 309 and 310 are differentiated in step S1001 to determine the angular acceleration, and if the absolute value of the angular acceleration is greater than or equal to some predetermined value k, a limiting control is disabled by setting the disable flag to 1, but regardless of whether the disable flag is set or not, the vibration control occurs. And as a summation, Applicant states that "in other words, the differentiated value has no role what so ever in controlling when the correction of the integrated value occurs. Indeed, Ohkawara, the differentiated value and the integrated value are not related at all."

In response to applicant's arguments against the references individually, one cannot show nonobviousness by attacking references individually where the rejections are based on combinations of references. See *In re Keller*, 642 F.2d 413, 208 USPQ 871 (CCPA 1981); *In re Merck & Co.*, 800 F.2d 1091, 231 USPQ 375 (Fed. Cir. 1986).

The Examiner points out that in the previous rejection, Ohkawara was not relied upon to control the correction of the integrated value, but rather, Ohkawara was used to teach the differentiation of the velocity signal to calculate an acceleration signal that is used to determine if panning/tilting is being performed. In column 28, lines 5-15,



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Ohkawara discloses that the velocity signal is differentiated to output the acceleration signal 1302. And in column 28, lines 35-50, this portion of Ohkawara was relied upon to teach the use of the acceleration signal to determine if panning/tilting is being performed (more specifically lines 37-39). As for the correction of the integrated value to substantially zero when the differentiated value is zero, Morofuji teaches this feature in column 23, lines 22-43, if the velocity is constant and the displacement is monotonously increasing (i.e. zero acceleration), then panning/tilting is determined in lines 27-31, and if panning/tilting is determined, the correction value is set to zero in lines 37-38.

Therefore, the limitation of "a correcting device that corrects the integrated value calculated by the integrating device to substantially zero when the differentiated value calculated by the differentiating device is substantially zero" is taught by the combination of Morofuji and Ohkawara, by using the pan/tilt determination based on acceleration of Ohkawara to replace the pan/tilt determination of Morofuji, to then control the correction based on the pan/tilt determination.

## Claim Rejections - 35 USC § 112

The following is a quotation of the first paragraph of 35 U.S.C. 112:

The specification shall contain a written description of the invention, and of the manner and process of making and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the same and shall set forth the best mode contemplated by the inventor of carrying out his invention.

Claims 2-13 are rejected under 35 U.S.C. 112, first paragraph, as failing to comply with the written description requirement. The claim(s) contains subject matter which was not described in the specification in such a way as to reasonably convey to

one skilled in the relevant art that the inventor(s), at the time the application was filed, had possession of the claimed invention. Claims 2,6, and 10 recite the newly added limitation that "the vibration isolator prevents image blur by moving a vibration determining device." There is insufficient support in the specification for the movement of a "vibration determining device," and is considered new matter.

For purposes of examination, the examiner believes this limitation should read as follows: "the vibration isolator prevents image blur by moving a vibration isolating device". These claims will be examined as understood by the examiner.

### Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

- (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.
- 1. Claim 1 is rejected under 35 U.S.C. 103(a) as being unpatentable over Morofuji et al. (US Patent # 6,208,377) in view of Ohkawara et al. (US Patent # 6,630,950).
- 2. In regard to claim 1, note Morofuji discloses the use of a vibration isolator that prevents an image blur due to a vibration of a camera by moving a correcting optical system (column 22, lines 50-64), the vibration isolator comprising a vibration speed determining device that determines a speed of the vibration (column 22, lines 50-53), an integrating device that integrates the speed determined by the vibration speed determining device (column 23, lines 1-6), and a controlling device that controls a

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position of the correcting optical system according to the integrated value (column 23, lines 1-12 and figure 22: 305 and 308; the integrated value is sent to the driving circuit to control the correcting optical system).

Therefore, it can be seen that the Morofuji device lacks a differentiating device that differentiates the speed determined by the vibration speed determining device and a correcting device that corrects the integrated value calculated by the integrating device to substantially zero when the differentiated value calculated by the differentiating device is substantially zero.

Ohkawara discloses the use of a differentiating device that differentiates the speed determined by the vibration speed determining device (column 28, lines 5-15 and 37-39; the velocity signal is differentiated to determine the acceleration in order to detect panning and tilting) and by combining the Ohkawara device to detect panning and tilting with the Morofuji device, Morofuji teaches the use of a correcting device that corrects the integrated value calculated by the integrating device to substantially zero when the differentiated value calculated by the differentiating device is substantially zero (column 23, lines 22-43; Morofuji teaches that when the device is panning or tilting, i.e. constant velocity and zero acceleration, that the correction value is corrected to zero, and by combining with Ohkawara to use acceleration for the pan/tilt detection, one would reach applicant's invention). Ohkawara teaches that the use of a differentiating device that differentiates the speed determined by the vibration speed determining device in order to detect pan/tilt is preferred in order to detect only start and end periods of the pan/tilt (column 27, lines 56-60). Therefore, it would have been obvious to one of

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ordinary skill in the art to modify the Morofuji device to include the use of a differentiating device as suggested by Ohkawara.

- 3. In regard to claim 17, note Morofuji discloses that the controlling device controls a movement of a correcting lens of the correcting optical system within a plane that is perpendicular to an optical axis of the camera (figure 1: 9 and 11).
- 4. Claims 2-5 and 10-13 are rejected under 35 U.S.C. 103(a) as being unpatentable over Morofuji et al. (US Patent # 6,208,377) in view of Ohkawara et al. (US Patent # 6,630,950) and further in view of Miyamoto et al (US Patent # 6,332,060).
- 5. In regard to claim 2, note the primary reference of Morofuji in view of Ohkawara discloses the use of a vibration isolator that prevents an image blur due to a vibration of a camera by moving a correcting optical system, as claimed in claim 1 above.

  Therefore, it can be seen that the primary reference fails to disclose the use of a switching device that turns on and off vibration isolation, wherein the controlling device keeps the vibration isolating device at a position until a predetermined time passes after the switching device turns on the vibration isolation and moves the vibration isolating device according to the vibration after the predetermined time passes.

Miyamoto discloses the use of a switching device that turns on and off vibration isolation (column 31, lines 51-63; and figure 20: S1007-1010, when the shutter button is pressed half way, it is considered to be turning the vibration control on), wherein the controlling device keeps the vibration isolating device at a position until a predetermined time passes after the switching device turns on the vibration isolation and moves the

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vibration isolating device according to the vibration after the predetermined time passes (column 34, lines 6-31 and figure 23; \$1305-1305; the centering process in step \$1012 of figure 20 is seen in figure 23, and the isolating device is held at the initial position until a set time passes). Miyamoto teaches that the use of a switching device that turns on and off vibration isolation, wherein the controlling device keeps the vibration isolating device at a position until a predetermined time passes after the switching device turns on the vibration isolation and moves the vibration isolating device according to the vibration after the predetermined time passes is preferred in order to prevent the detection of an incorrect correction value (column 34, lines 18-27). Therefore, it would have been obvious to one of ordinary skill in the art to modify the primary device of Morofuji and Ohkawara to include the use of a switching device that turns on and off vibration isolation, wherein the controlling device keeps the vibration isolating device at a position until a predetermined time passes after the switching device turns on the vibration isolation and moves the vibration isolating device according to the vibration after the predetermined time passes, as suggested by Miyamoto.

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- 6. In regard to claim 3, note Miyamoto discloses that the controlling device stops the vibration isolating device at a position when the switching device turns off the vibration isolation (column 26, lines 35-41; column 32, lines 26-31; and figure 20: \$1015-\$1019; when the shutter button is released ,\$1015, it is considered to be turning off the vibration isolating device).
- 7. In regard to claim 4, note Miyamoto discloses the use of a controlling device that gradually decreases a driving amount of the vibration isolating device to stop the

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vibration isolating device at a position after the switching device turns off the vibration isolation (column 26, lines 35-41; column 32, lines 26-31; and figure 20: S1015-S1019; when the shutter button is released ,S1015, it is considered to be turning off the vibration isolating device).

- 8. In regard to claim 5, note Miyamoto discloses that the controlling device does not calculate a driving signal for driving the vibration isolating device when the vibration isolation is off (column 32, lines 27-31; the shake detection sensor stops detection and the lens is held in place) and starts calculating the driving signal after the switching device turns on the vibration isolation (column 31, lines 24-27; the shake detection sensor starts calculating when the shutter button is pressed half way).
- 9. In regard to claim 10, note the primary reference of Morofuji in view of Ohkawara discloses the use of a vibration isolator that prevents an image blur due to a vibration of a camera by moving a correcting optical system, as claimed in claim 1 above.

  Therefore, it can be seen that the primary reference fails to disclose the use of a switching device that turns on and off vibration isolation, wherein the controlling device starts moving the vibration isolating device with a driving amount that is smaller than that for preventing the image blur when the switching device turns on the vibration isolation and drives the vibration isolating device while gradually increasing the driving amount to that for preventing the image blur.

Miyamoto discloses the use of a switching device that turns on and off vibration isolation (column 31, lines 51-63; and figure 20: S1007-1010, when the shutter button is pressed half way, it is considered to be turning the vibration control on), wherein the

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controlling device starts moving the vibration isolating device with a driving amount that is smaller than that for preventing the image blur when the switching device turns on the vibration isolation and drives the vibration isolating device while gradually increasing the driving amount to that for preventing the image blur (column 21, line 52- column 22, line 45 and column 26, lines 24-27; when the isolation device is turned on, the driving duty/lens velocity VR are gradually increased until they reach the target lens velocity VC for 100% correction). Miyamoto teaches that the use of a switching device that turns on and off vibration isolation, wherein the controlling device starts moving the vibration isolating device with a driving amount that is smaller than that for preventing the image blur when the switching device turns on the vibration isolation and drives the vibration isolating device while gradually increasing the driving amount to that for preventing the image blur is preferred in order to compensate for overshoot or oscillation caused by starting the motor at full driving duty (column 25, lines 1-5). Therefore, it would have been obvious to one of ordinary skill in the art to modify the primary device of Morofuji and Ohkawara to include the use of a switching device that turns on and off vibration isolation, wherein the controlling device starts moving the vibration isolating device with a driving amount that is smaller than that for preventing the image blur when the switching device turns on the vibration isolation and drives the vibration isolating device while gradually increasing the driving amount to that for preventing the image blur in order to compensate for overshoot or oscillation caused by starting the motor at full driving duty, as suggested by Miyamoto.

10. In regard to claim 11, note Miyamoto discloses that the controlling device stops the vibration isolating device at a position when the switching device turns off the vibration isolation (column 26, line 35-41; column 32, lines 26-31; and figure 20: S1015-S1019, when the shutter button is released it is considered to be turning off the isolating device).

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- 11. In regard to claim 12, note Miyamoto discloses the use of a controlling device that gradually decreases a driving amount of the vibration isolating device to stop the vibration isolating device at a position after the switching device turns off the vibration isolation (column 26, lines 35-41; column 32, lines 26-31; and figure 20: S1015-S1019; when the shutter button is released ,S1015, it is considered to be turning off the vibration isolating device ).
- 12. In regard to claim 13, note Miyamoto discloses that the controlling device does not calculate a driving signal for driving the vibration isolating device when the vibration isolation is off (column 32, lines 27-31; the shake detection sensor stops detection and the lens is held in place) and starts calculating the driving signal after the switching device turns on the vibration isolation (column 31, lines 24-27; the shake detection sensor starts calculating when the shutter button is pressed half way).
- 13. Claim 6-7 and 9 is rejected under 35 U.S.C. 103(a) as being unpatentable over Morofuji et al. (US Patent # 6,208,377) in view of Ohkawara et al. (US Patent # 6,630,950) and further in view of Imafuji et al. (US Patent # 5,617,177).

14. In regard to claim 6, note the primary reference of Morofuji in view of Ohkawara discloses the use of a vibration isolator that prevents an image blur due to a vibration of a camera by moving a correcting optical system, as claimed in claim 1 above.

Therefore, it can be seen that the primary reference fails to disclose the use of a switching device that turns on and off vibration isolation, wherein the controlling device that keeps the vibration isolating device at an origin until a position of the vibration isolating device for preventing the image blur is the origin after the switching device turns on the vibration isolation and moves the vibration isolating device according to the vibration after the position of the vibration isolating device for preventing the image blur is the origin.

Imafuji discloses the use of a switching device that turns on and off vibration isolation (column 4, line 65 – column 5, line 5; and figure 5: S22, when the shutter button is pressed half way, it is considered to be turning the vibration control on), wherein the controlling device that keeps the vibration isolating device at an origin until a position of the vibration isolating device for preventing the image blur is the origin after the switching device turns on the vibration isolation and moves the vibration isolating device according to the vibration after the position of the vibration isolating device for preventing the image blur is the origin (column 5, lines 15-16; and figure 5: S24, the vibration isolator is set to an initial position when the isolator is turned on and move the isolating device according to the vibration after the position of the vibration isolating device for preventing the image blur is the origin). Imafuji teaches that the use of a switching device that turns on and off vibration isolation, wherein the controlling device

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that keeps the vibration isolating device at an origin until a position of the vibration isolating device for preventing the image blur is the origin after the switching device turns on the vibration isolation and moves the vibration isolating device according to the vibration after the position of the vibration isolating device for preventing the image blur is the origin is preferred in order to compensate for drifts (column 1, lines 30-40 and column 5, lines 33-38; by setting the initial position to a known position, there is no error in position detection caused by drifts). Therefore, it would have been obvious to one of ordinary skill in the art to modify the primary device of Morofuji and Ohkawara to include the use of a switching device that turns on and off vibration isolation, wherein the controlling device that keeps the vibration isolating device at an origin until a position of the vibration isolating device for preventing the image blur is the origin after the switching device turns on the vibration isolation and moves the vibration isolating device according to the vibration after the position of the vibration isolating device for preventing the image blur is the origin, as suggested by Imafuji.

- 15. In regard to claim 7, note Imafuji discloses that the controlling device stops the vibration isolating device at a position when the switching device turns off the vibration isolation (column 5, line 65 –column 6 line 20; and figure 5: S30-S34, when the shutter button is released it is considered to be turning off the isolating device).
- 16. In regard to claim 9, note Imafuji discloses that the controlling device does not calculate a driving signal for driving the vibration isolating device when the vibration isolation is off (column 6, lines 1-20; the shake detection sensor stops detection and the lens is held in place) and starts calculating the driving signal after the switching device

turns on the vibration isolation (column 5, lines 1-21; the shake detection sensor starts calculating when the shutter button is pressed half way).

- 17. Claim 8 is rejected under 35 U.S.C. 103(a) as being unpatentable over Morofuji et al. (US Patent # 6,208,377) in view of Ohkawara et al. (US Patent # 6,630,950) and further in view of Imafuji et al. (US Patent # 5,617,177) and Miyamoto et al (US Patent # 6,332,060).
- In regard to claim 8, note the primary reference of Morofuji in view of Ohkawara 18. and Imafuji discloses the use of a vibration isolator that prevents an image blur due to a vibration of a camera by moving a correcting optical system, as claimed in claim 6 above. Therefore, it can be seen that the primary reference fails to disclose the use of a controlling device that gradually decreases a driving amount of the vibration isolating device to stop the vibration isolating device at a position after the switching device turns off the vibration isolation. Miyamoto discloses the use of a controlling device that gradually decreases a driving amount of the vibration isolating device to stop the vibration isolating device at a position after the switching device turns off the vibration isolation (column 26, lines 35-41; column 32, lines 26-31; and figure 20: S1015-S1019; when the shutter button is released ,S1015, it is considered to be turning off the vibration isolating device). Miyamoto teaches the use of gradually decreasing a driving amount in order to correctly center the lens (column 26, lines 10-15). Therefore, it would have been obvious to one of ordinary skill in the art to modify the primary device to include the use of gradually decreasing a driving amount of the vibration isolating

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device to stop the isolating device at a position after the isolating device is turned off so as to correctly center the lens.

- 19. Claim 18 are rejected under 35 U.S.C. 103(a) as being unpatentable over Morofuji et al. (US Patent # 6,208,377) in view of Ohkawara et al. (US Patent # 6,630,950) and further in view of Terui et al (US Patent # 5,717,611).
- 20. In regard to claim 18, note the primary reference of Morofuji in view of Ohkawara discloses the use of a vibration isolator that prevents an image blur due to a vibration of a camera by moving a correcting optical system, as claimed in claim 1 above.

  Therefore, it can be seen that the primary reference fails to disclose the use of a low pass filter for filtering a vibration speed signal from the vibration speed determining device, wherein the differentiating device and the integrating device respectively differentiates and integrates the filtered vibration speed signal from the low pass filter.

Terui discloses the use of a low pass filter for filtering a vibration speed signal from the vibration speed determining device, wherein the signal is processed for vibration correction using the filtered vibration speed signal from the low pass filter (column 1, lines 19-22 and column 2, lines 60-63). Terui teaches that the use of a low pass filter for filtering a vibration speed signal from the vibration speed determining device, wherein the differentiating device and the integrating device respectively differentiates and integrates the filtered vibration speed signal from the low pass filter is preferred in order to only compensate for slight motions (column 1, lines 19-22 and column 2, lines 10-15). Therefore, it would have been obvious to one of ordinary skill in

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the art to modify the primary device to include the use of a low pass filter for filtering a vibration speed signal from the vibration speed determining device, wherein the differentiating device and the integrating device respectively differentiates and integrates the filtered vibration speed signal from the low pass filter is preferred in order to only compensate for slight motions, as suggested by Terui.

- 21. Claim 20 is rejected under 35 U.S.C. 103(a) as being unpatentable over Okazaki (US Patent # 5,794,078) in view of Morofuji et al. (US Patent # 6,208,377).
- 22. In regard to claim 20, note Okazaki discloses the use of a vibration isolator that prevents an image blur due to a vibration of a camera by moving a correcting optical system (column 10, lines 62-63), the vibration isolator comprising a vibration acceleration determining device that determines an acceleration of the vibration (column 8, lines 9-13), an integrating device that twice-integrates the acceleration determined by the vibration acceleration determining device (column 10, lines 30-38), and a controlling device that controls a position of the correcting optical system (column 10, lines 62-63). Therefore, it can be seen that the Okazaki device lacks the use of a correcting device that corrects the twice-integrated value calculated by the integrating device to substantially zero when the acceleration value determined by the vibration acceleration determining device is substantially zero and the controlling device controls the position according to the corrected twice-integrated value.

Morofuji discloses the use of a correcting device that corrects the displacement value calculated by the integrating device to substantially zero when the acceleration

value determined by the vibration acceleration determining device is substantially zero and the controlling device controls the position according to the corrected displacement value (column 23, lines 22-43). Morofuji teaches that the use of a correcting device that corrects the displacement value calculated by the integrating device to substantially zero when the acceleration value determined by the vibration acceleration determining device is substantially zero and the controlling device controls the position according to the corrected displacement value is preferred in order to only correct for unintentional vibrations instead of when panning/tilting is occurring (column 23, lines 22-43). Therefore, it would have been obvious to one of ordinary skill in the art to modify the Okazaki device to include a correcting device that corrects the twice-integrated value calculated by the integrating device to substantially zero when the acceleration value determined by the vibration acceleration determining device is substantially zero and the controlling device controls the position according to the corrected twice-integrated value in order to only correct for unintentional vibrations instead of when panning/tilting is occurring, as suggested by Okazaki.

### Allowable Subject Matter

Claim 19 is objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

#### Conclusion

THIS ACTION IS MADE FINAL. Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Chriss S. Yoder, III whose telephone number is (571) 272-7323. The examiner can normally be reached on M-F: 8 - 4:30.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Vivek Srivastava can be reached on (571) 272-7304. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

CSY July 19, 2006

> VIVEK SRIVASTAVA PRIMARY EXAMINER